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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/038,355 | 01/04/2002 | Scott Geng | 112153.126 | 7029 |

7590

10/05/2004

Peter M. Diciara
Hale and Dorr LLP
60 State Street
Boston, MA 02109

EXAMINER

IQBAL, NADEEM

ART UNIT

PAPER NUMBER

2114

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

RECEIVED

OCT 29 2004

Technology Center 2100

| | | | |
|------------------------------|-------------------------------|-----------------------------|--|
| Office Action Summary | Application No. 10/038,355 | Applicant(s) GENG ET AL. | |
| | Examiner Nadeem Iqbal | Art Unit 2114 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5 and 7-10 is/are rejected.
- 7) ☐ Claim(s) 3 and 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

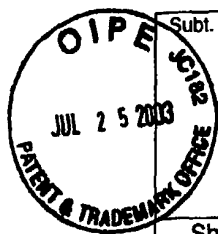
Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>Jul 28, 2003</u> . | 6) <input type="checkbox"/> Other: _____ |



Subt. For, PTO-1449

INFORMATION DISCLOSURE
IN AN APPLICATION

(Use several sheets if necessary)

Sheet

1

OF

1

Docket Number

112153.126

Application Number

10/038,355

Applicant

Scott Geng, et al

Filing Date

January 4, 2002

Group Art Unit

2152

U.S. Patent Documents

| EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|--------------------|----------|-----------------------|-------|----------|-------------------------------|
| N1 | 6,091,732 | 07/18/00 | Alexander, Jr. et al | | | |
| N1 | 6,178,171 | 01/23/01 | Alexander, Jr. et al. | | | |
| N1 | 5,818,842 | 10/06/98 | Burwell et al. | | | |
| N1 | 5,835,725 | 11/10/98 | Chiang et al. | | | |
| N1 | 5,825,772 | 10/20/98 | Dobbins et al. | | | |
| N1 | 5,208,811 | 05/04/93 | Kashio et al. | | | |
| N1 | 6,003,137 | 12/14/99 | Kawasaki | | | |
| N1 | 5,590,285 | 12/31/96 | Krause et al. | | | |
| N1 | 5,535,338 | 07/09/96 | Krause et al. | | | |
| N1 | 6,195,705 | 02/27/01 | Leung | | | |
| N1 | 5,473,599 | 12/05/95 | Li et al. | | | |
| N1 | 5,970,066 | 10/19/99 | Lowry et al. | | | |

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JUL 28 2003

Technology Center 2100

Foreign Patent Documents

| EXAMINER INITIAL | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION | |
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Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)

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EXAMINER

Nadeem Z. Ali

DATE CONSIDERED

9.28-04

EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP § 609: Draw Line through citation if not conformance and not considered. Include copy with next communication to applicant.



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Bib Data Sheet

CONFIRMATION NO. 7029

| | | | | |
|------------------------------------|---|---------------------|-------------------------------|--|
| SERIAL NUMBER 10/038,355 | FILING DATE 01/04/2002 RULE | CLASS 709 | GROUP ART UNIT 2152 | ATTORNEY DOCKET NO. 112153.126 |
|------------------------------------|---|---------------------|-------------------------------|--|

APPLICANTS

Scott Geng, Westboro, MA;
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Ewan Milne, Stow, MA;
Max Smith, Natick, MA;
Alan Greenspan, Northboro, MA;
Edward Duffy, Arlington, MA;
Peter Schuler, Hampstead, NH;

** CONTINUING DATA *****

THIS APPLN CLAIMS BENEFIT OF 60/285,296 04/20/2001

** FOREIGN APPLICATIONS *****

IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** SMALL ENTITY **
** 02/01/2002

| | | | | |
|---|------------------------|----------------------|--------------------|-------------------------|
| Foreign Priority claimed <input type="checkbox"/> yes <input checked="" type="checkbox"/> no | STATE OR COUNTRY MA | SHEETS DRAWING 14 | TOTAL CLAIMS 10 | INDEPENDENT CLAIMS 4 |
| 35 USC 119 (a-d) conditions met <input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Met after Allowance | | | | |
| Verified and Acknowledged Examiner's Signature <i>[Signature]</i> Initials | | | | |

ADDRESS

Peter M. Dichiaro
Hale and Dorr LLP
60 State Street
Boston, MA 02109

TITLE

Service clusters and method in a processing system with failover capability

| | | |
|-----------------------------------|---|--|
| FILING FEE RECEIVED 412 | FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following: | <input type="checkbox"/> All Fees |
| | | <input type="checkbox"/> 1.16 Fees (Filing) |
| | | <input type="checkbox"/> 1.17 Fees (Processing Ext. of time) |
| | | <input type="checkbox"/> 1.18 Fees (Issue) |
| | | <input type="checkbox"/> Other _____ |
| | | <input type="checkbox"/> Credit |

Notice of References Cited

Application/Control No.

10/038,355

Applicant(s)/Patent Under
Reexamination
GENG ET AL.

Examiner

Nadeem Iqbal

Art Unit

2114

Page 1 of 1

U.S. PATENT DOCUMENTS

| * | | Document Number Country Code-Number-Kind Code | Date MM-YYYY | Name | Classification |
|---|---|--|-----------------|------------------|----------------|
| X | A | US-6,728,780 B1 | 04-2004 | Hebert, James E. | 709/239 |
| X | B | US-6,763,479 B1 | 07-2004 | Hebert, James E. | 714/4 |
| X | C | US-5,197,148 A | 03-1993 | Blount et al. | 714/5 |
| X | D | US-6,684,343 B1 | 01-2004 | Bouchier et al. | 714/4 |
| | E | US- | | | |
| | F | US- | | | |
| | G | US- | | | |
| | H | US- | | | |
| | I | US- | | | |
| | J | US- | | | |
| | K | US- | | | |
| | L | US- | | | |
| | M | US- | | | |

FOREIGN PATENT DOCUMENTS

| * | | Document Number Country Code-Number-Kind Code | Date MM-YYYY | Country | Name | Classification |
|---|---|--|-----------------|---------|------|----------------|
| | N | | | | | |
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NON-PATENT DOCUMENTS

| * | | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) |
|---|---|---|
| | U | |
| | V | |
| | W | |
| | X | |

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1, 4, 7, 9, 8 & 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Hebert (U.S. Patent Number 6728780).
2. . As per claims 1 & 4, Hebert teaches (col. 2, lines 63-65) a network node which includes a first network interface, a second network interface, and a high availability networking mechanism that operates at the application layer and is configured to configure a backup interface. He thus teaches limitations pertain to a plurality of computer processors connected to an internal communication network, configuration logic to define and establish a virtual local area communication network over the internal network. He also teaches (col. 5, lines 37-39) that each host interface includes a MAC address. He thus teaches limitations pertain to each computer processor in the virtual local area communication network has a corresponding virtual MAC address and provides communication among a set of computer processors. Hebert also teaches (col. 2, lines 32-35) a method and mechanism failover with warm standby. He also teaches that a network connection may be utilized in the event of a failure or a primary connection. He also teaches to configure a secondary network connection with dummy parameter, monitors the primary network connection, automatically detected a failure in the

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primary connection, and switches to the secondary connection in a short period of time. He thus teaches limitations pertains to failover logic, responsive to a failure by a computer processor, to allocates a computer processor from the plurality to replace the failed processor.

3. As per claims 7 & 9, Hebert teaches (col. 5, lines 12-15) TCP/IP communications protocol and that each host connected to a network has an assigned logical address, or an IP address. He also teaches that (col. 5, lines 16-18) when one host wishes to convey data to another host, packets are formed which contain the data and the IP address of the destination host and the packets are then delivered to the desired destination. He thus teaches cluster logic for receiving a request message for the service, the messages having the IP address, and for distributing the request to one of the at least two computer processors having logic to provide the service.

4. As per claims 8 & 10, He teaches as stated above the logic for distributing, since he teaches that when one host wishes to convey data to another host, packets are formed which contain the data and the IP address of the destination host and the packets are then delivered to the desired destination.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 2, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hebert (U.S. Patent Number 6728780).

2. As per claims 2 & 5, He does not explicitly disclose virtual interfaces to define software communication paths among processor of the virtual network and that failover logic includes logic to establish virtual interfaces from the processors in the virtual network to the processor that replaces the failed processor. He teaches (col. 2, lines 37-42) to utilize an application layer mechanism which configures a secondary network connection with dummy parameters, monitors the primary network connection, automatically detects a failure in the primary connection, and switches to the secondary connection in a short period of time. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to realize that He would include virtual interfaces to define software communication paths among processors of the virtual network, since He teaches to utilize an application layer mechanism which configures a secondary network connection with dummy parameters, and automatically detects a failure in the primary connection, and switches to the secondary connection in a short period of time, thereby, clearly define software communication paths among processor of the virtual network.

Allowable Subject Matter

8. Claims 3 & 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nadeem Iqbal whose telephone number is (703)-308-5228 (After Oct. 15, My New telephone number is (571)-272-3659 and The Tech. Center Main number would be (571) 272-2100). The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

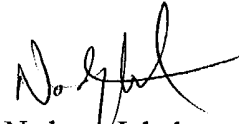
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W Beausoliel can be reached on (703)-305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/038,355

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Page 6

A handwritten signature in black ink, appearing to read 'N. Iqbal', with a stylized flourish extending from the end.

Nadeem Iqbal
Primary Examiner
Art Unit 2114

NI